

# Idaho Currents

## State, Utility Partner To Assist Residential Customers

The Idaho Office of Energy Resources and Rocky Mountain Power are partnering to help the utility's customers take advantage of low-interest loans and cash incentives to help make homes more energy efficient and save consumers money on monthly electric bills.

Residential electric rates in the Rocky Mountain Power service area increased about 28 percent during 2007. The increase is the result of the Bonneville Power Administration's suspension of a monthly residential and small farm customer credit. BPA suspended the credit following a recent ruling from the U.S. Ninth Circuit Court of Appeals.

The partnership includes a media campaign, which began the first week of December to promote OER's energy conservation loans and the utility's cash incentive program. Rocky Mountain Power produced a bill stuffer that was included in the December utility bill explaining both programs and OER produced a similar brochure that will be distributed to heating and insulation dealers within the RMP service area.

Both the state and Rocky Mountain Power are committed to working with residents in southeastern Idaho to reduce energy consumption through efficiency measures. This unique partnership optimizes the support available to southeastern Idaho residents by leveraging Rocky Mountain Power's

incentive programs with the state's low-interest loan program. When combined, the incentives and the loan program result in a smaller investment required and a quicker payback of the loans.

"Efficiency and conservation are the easiest and most responsible ways to increase our energy independence and ensure our economic future," says Gov. C.L. "Butch" Otter. "Anything we can do as part of a public-private partnership to promote cost-effective energy savings has my support."

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To learn more about the loan program, call the Idaho Energy Hotline at 1-800-334-SAVE or log onto the Office of Energy Resources' website at [www.energy.idaho.gov/loans](http://www.energy.idaho.gov/loans). Loan applications are available online. Energy specialists are also available at the OER website via the "Ask an Energy Specialist" link.

For information on Rocky Mountain Power's energy saving incentives, log onto [www.rockymountainpower.net/hes](http://www.rockymountainpower.net/hes) or call 1-800-942-0266.

# CFLs Evolve To Meet Consumer Demand

As more and more consumers switch to compact fluorescent lights (CFLs), new questions are being asked about their capabilities, as well as the capabilities of incandescent light bulbs.

- Do electric dimmer switches for lights save energy compared to the standard on/off switches?
- Can you use dimmer switches with CFLs?

“Dimmer switches on incandescent lights do not save any energy,” says Tim O’Leary, a senior energy specialist with the Idaho Office of Energy Resources. “The way the units work is they dump excess power as heat to permit less power to go to the light fixture.

“In fact, using dimmer switches can cause bulbs to burn out faster, especially bulbs in can lights,” O’Leary adds. “The change in power brought on by changing the light level causes a change in the electrical harmonics, which can damage incandescent filaments.”

As for the second question, dimmers and the electronic ballasts of most CFLs don’t mix well. The CFLs will dim a bit, but will hum loudly when dimmed, and their life will be shortened significantly.

So what should a person do if they want to use CFLs, but want to have the mood lighting produced by using dimmers? Are there any alternatives?

A recent article in the *Northwest Current News*, funded by the Northwest Energy Efficiency Alliance, says there are two alternatives, “one evolutionary and the other perhaps revolutionary.”

“The CFL industry has responded to the dimmer issue by developing CFLs that work with dimmers,” writes Dick Watson with *Northwest Current News*. “I found eight models, three of which were floods. Of the three, only one was Energy Star-compliant, but all were manufactured by well-known companies, including General Electric, Westinghouse, and Phillips.”

Watson purchased the 16-watt Phillips lamps and tested them in his kitchen. “The lamp warmed up

quickly,” he says. “Its light was slightly cooler than the incandescents. When dimmed, the bulb initially buzzed slightly, but quieted as it warmed.”

The lamp would not dim as much as the incandescents did, and the light seemed relatively cooler compared with dimmed incandescents but if you want this effect with CFLs, Watson says this is a cost-effective solution.

## CFL revolutions

As for the CFL revolution, it may have begun with the winner of the 2007 Solid State Lighting Competition: the LR6 downlight, designed and manufactured by North Carolina-based LED Lighting Fixtures, says Watson.

The LR6 can be installed in most existing downlight cans. It is fully dimmable and provides the option of two different color temperatures – a warmer color, similar to that of incandescent lighting, or cooler “whiter” light. Its color rendition is better than with CFLs, although not quite as good as the incandescent lighting.

Although this all sounds great, Watson points out that the new LR6 is much more expensive than today’s CFLs. “However, for commercial applications with high usage, its long life – 50,000 hours – high efficiency and elimination of relamping expenses and outages make the LR6 very economical.”

## Available locally

Since CFLs are cooler than incandescent lights, they are a good solution for glass display cases. You can choose your color tone and amount of light needed from a variety of products found in most home improvement stores.

When disposing a CFL, as with all light bulbs, handle them carefully. However, CFLs should be recycled through your nearest hazardous waste collection site. To find out where to take your old CFLs, see the Idaho Department of Environmental Quality website at [www.deq.idaho.gov](http://www.deq.idaho.gov).

# Low-Interest Loans, Cash Incentives

The Idaho Office of Energy Resources provides loans to help homeowners conserve energy and ultimately save on their utility bills. Eligible projects include upgrading heating systems and water heaters, insulation, and wood, pellet or gas stoves.

The application is a two-step process. The homeowner decides what needs to be done to the home, and obtains a bid for each project. The application and bid for each project are sent to the Office of Energy Resources in Boise for approval.

If the project application is approved, a credit application is sent to the homeowner. Credit approval is based on good credit and the ability to repay the loan.

Both the project and credit applications must be fully approved prior to any work being started. The loan may not be used to refinance existing or completed projects.

- Five year loan at 4 percent interest
- \$1,000 borrowing minimum; \$15,000 maximum
- Fuel-blind – doesn't matter what type of heating system is in the home
- Application must be approved before work is started
- Available for primary residences throughout Idaho.

Rocky Mountain Power's Home Energy Savings Program offers cash incentives and referrals to qualified contractors to help make homes more energy efficient. Cash is offered on a variety of products and services that will keep the home comfortable and lower electricity bills.

Home Energy Savings program cash incentives include:

- \$1.00/sq.ft. for insulation
- \$100 for heat pump tune-up
- \$1.50/sq.ft. for upgrading windows
- \$150 for sealing ducts

## Tips For Buying, Using Energy-Efficient Bulbs

### What to expect when switching to compact fluorescent light bulbs:

- CFLs use about one-quarter of the energy an incandescent bulb uses to produce the same amount of light. To replace a traditional 60-watt bulb, look for a CFL bulb in the 15-watt range.
- Look for Energy Star® bulbs. They are the most energy efficient and have been rigorously tested.
- The start-up time of a CFL can be slower than an incandescent light, even though the color and brightness are similar.
- CFLs produce light that's more diffused than incandescent lights, so they are very good for area lighting.
- To maximize the lifetime of a CFL, install it where it will stay on for at least 3 hours at a time. The more a CFL is turned on and off, the quicker it burns out.
- Only CFLs designed for the outdoors should be used in outdoor fixtures – check the label. Also, just as with incandescents, check whether the bulb is rated for an enclosed or uncovered fixture.
- Recycle CFLs instead of throwing them in the trash. Take them to an environmental drop station nearest you.

- \$50 towards purchase of high-efficiency electric water heater

### Electric appliance upgrade incentives:

- Clothes washer - \$75
- Refrigerator - \$20
- Dishwasher - \$20
- Water heater - \$50
- Lighting fixtures and ceiling fans – \$20

# OER Welcomes New Staff Members



The Office of Energy Resources welcomes two new employees, Lisa Petersen and Dr. Ralph Bennett.

Petersen joined the OER as the new Director of Energy Policy on Dec. 3. She brings a career passion for the energy industry, and in particular, how its effective development, delivery, and use can

benefit all the citizens of Idaho. She says she is very excited about the opportunity to work with the Office during such a dynamic and important time in both Idaho and the nation's energy future.

Her career began at Idaho Power Company, shortly after graduating with a degree in information sciences from Boise State University. During her more than 18-year tenure at the utility, Petersen served in a variety of roles in both the power supply and transmission areas of the business, including Planning and Resources, Power Operations, Wholesale Operations, and Transmission, as well as managing Idaho Power's transmission access database and coordinating policy and procedures with the Federal Energy Regulatory Commission.

Most recently she was Policy Strategist for the Idaho Public Utilities Commission, where she advised the Commissioners on utilities and regulation policy.

In her new role, Petersen will lead the development of actionable policies from the 2007 Idaho Energy Plan, helping clarify the objectives of the Office and shape the direction of the Office in achieving the Governor's energy vision for Idaho.

Petersen says much of her effort, at least initially, will be devoted to building collaborative alliances

with state and federal agencies, resource developers, utilities, and other stakeholders – especially related to siting new transmission, pipelines, and electric generating facilities.

"I'm enthused about the mission to position Idaho to share in an abundant energy future," says Petersen, "and I believe the Office of Energy Resources is an ideal place to put that enthusiasm to work."

Bennett, Director of International and Regional Partnerships at the Idaho National Laboratory, is on part-time loan to OER from the INL, where he has worked for 18 years.

With the creation of the Office of Energy Resources within the Governor's Office, the INL offered to help out in a number of areas of energy technology and policy analysis, and Bennett will coordinate their support.

Bennett has held a number of positions at the INL, starting as a senior engineer and principal investigator in the nuclear energy division, and eventually working his way up to director of the division a few years ago. He was the Director of Strategic Planning during the first two years of the newly formed INL before taking his current position this spring.

Bennett's degrees are in nuclear engineering, with a Ph.D. from the Massachusetts Institute of Technology in 1979. He travels worldwide as the Technical Director of the Generation IV International Forum, a group of 13 countries collaborating on R&D of next generation nuclear energy systems.



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